

What is Claimed is:

1. An optical pickup device which converges light emitted from a laser upon an optical disk through an objective lens and executes at least one of recording and reproduction of information on the optical disk, comprising:

a first light detector which receives reflected light from the optical disk;

a second light detector which receives a part of emitted light from the laser;

a dividing means for dividing a first output signal outputted from the first light detector by a second output signal outputted from the second light detector; and

an RF-signal detecting means for detecting an RF signal from the signal obtained by a division of the dividing means.

2. The optical pickup device according to claim 1, wherein the dividing means executes auto gain control of the first output signal outputted from the first light detector.

3. The optical pickup device according to claim 1, further comprising a first phase-compensation circuit which allows the phase of the first output signal outputted from the first light detector to agree with the phase of the second output signal outputted from the second light detector.

4. The optical pickup device according to claim 1, further

comprising a second phase-compensation circuit which allows the phase of the second output signal outputted from the second light detector to agree with the phase of the first output signal outputted from the first light detector.

5. An optical pickup device which converges light emitted from a laser upon an optical disk through an objective lens and executes at least one of recording and reproduction of information on the optical disk, comprising:

- a first light detector which receives reflected light from the optical disk;

- a second light detector which receives a part of emitted light from the laser;

- an amplitude correcting means for relating in advance the amplitude of a first output signal outputted from the first light detector and the amplitude of a second output signal outputted from the second light detector at least at two measurement points which differ in the amplitude of the first output signal, and correcting the amplitude of the first output signal, using a variation in the amplitude of the second output signal when the information is reproduced; and

- an RF-signal detecting means for detecting an RF signal from the first output signal whose amplitude is corrected by the amplitude correcting means.

6. The optical pickup device according to claim 5, wherein the amplitude correcting means relates the amplitude of the first output signal to the amplitude of the second output signal, by interpolating amplitude levels between the measurement points.

7. The optical pickup device according to claim 5, wherein the amplitude correcting means relates the amplitude of the first output signal to the amplitude of the second output signal, at two measurement points of the longest mark part and the longest space part.

8. The optical pickup device according to claim 5, wherein the amplitude correcting means relates the amplitude of the first output signal to the amplitude of the second output signal, at two or more measurement points which differ in the radius position of the optical disk.

9. The optical pickup device according to claim 8, wherein the amplitude correcting means relates the amplitude of the first output signal to the amplitude of the second output signal, by interpolating radius positions between the two or more measurement points where the amplitude of the first output signal is related to the amplitude of the second output signal.

10. The optical pickup device according to claim 5, wherein the amplitude correcting means relates the amplitude of the first output signal to the amplitude of the second output signal, at two measurement points of an interior-circumference part and an exterior-circumference part of the optical disk.

11. The optical pickup device according to claim 5, wherein the amplitude correcting means: measures the amplitude of the first output signal and the amplitude of the second output signal at two measurement points of a space part and a mark part of a specific reproduction signal; calculates the amplitude of the first output signal after corrected so that the emitted light of the laser becomes constant, based on the amplitude of the first output signal and the amplitude of the second output signal which are measured; creates an amplitude correction function, based on the first output signal before corrected and the first output signal after corrected; and corrects the amplitude of the first output signal when the information is reproduced, using the created amplitude correction function.

12. A signal processing method for an optical pickup device which converges light emitted from a laser upon an optical disk through an objective lens and executes at least one of recording and reproduction of information on the optical disk, comprising:

a first light-receiving step of receiving reflected receiving from the optical disk with a first light detector;

a second light-receiving step of receiving a part of emitted light from the laser with a second light detector;

a dividing step of dividing a first output signal outputted from the first light detector by a second output signal outputted from the second light detector; and

an RF-signal detecting step of detecting an RF signal from the signal obtained by a division of the dividing step.

13. A signal processing method for an optical pickup device which converges light emitted from a laser upon an optical disk through an objective lens and executes at least one of recording and reproduction of information on the optical disk, comprising:

a first light-receiving step of receiving reflected receiving from the optical disk with a first light detector;

a second light-receiving step of receiving a part of emitted light from the laser with a second light detector;

an amplitude correcting step of relating in advance the amplitude of a first output signal outputted from the first light detector and the amplitude of a second output signal outputted from the second light detector at least at two measurement points which differ in the amplitude of the first output signal, and correcting the amplitude of the first output signal, using a variation in the amplitude

of the second output signal when the information is reproduced;
and

an RF-signal detecting step of detecting an RF signal from the first output signal whose amplitude is corrected in the amplitude correcting step.

14. An optical disk drive unit, which is provided with a rotating means that rotates an optical disk, and an optical pickup device that executes at least one of recording and reproduction of information on the optical disk, wherein the optical pickup device comprises:

a laser which emits light;

a first light detector which receives reflected light obtained when emitted light from the laser is reflected by the optical disk;

a second light detector which receives a part of emitted light from the laser;

a dividing means for dividing a first output signal outputted from the first light detector by a second output signal outputted from the second light detector; and

an RF-signal detecting means for detecting an RF signal from the signal obtained by a division of the dividing means.

15. An optical disk drive unit, which is provided with a rotating means that rotates an optical disk, and an optical pickup device that executes at least one of recording and

reproduction of information on the optical disk, wherein the optical pickup device comprises:

a laser which emits light;

a first light detector which receives reflected light obtained when emitted light from the laser is reflected by the optical disk;

a second light detector which receives a part of emitted light from the laser;

an amplitude correcting means for relating in advance the amplitude of a first output signal outputted from the first light detector and the amplitude of a second output signal outputted from the second light detector at least at two measurement points which differ in the amplitude of the first output signal, and correcting the amplitude of the first output signal, using a variation in the amplitude of the second output signal when the information is reproduced; and

an RF-signal detecting means for detecting an RF signal from the first output signal whose amplitude is corrected by the amplitude correcting means.